SEMI-ANNUAL STATUS REPORT
NASA GRANT
June 15, 1965 - Dec. 15, 1965

Interim

During the above-named period, work continued on the problems of stereotaxic lesioning of dogs in those areas (cerebellar and brainstem) where we have already shown thiethylperazine to localize. In addition, we have been investigating the effects of related drugs on neurohumor release from isolated synaptic vesicles as a possible mechanism of phenothiazine action.

The work on sites of localization and action of thiethylperazine and examination of the correlation between these sites, has proceeded in essentially the orderly manner described in the original grant proposal. We have determined where thiethylperazine localizes both in dog and rabbit brain and more specifically in dog cerebellar and associated areas. We have established that this drug effectively protects dogs against swing-induced emesis and what the optimal conditions for inducing swing sickness are. We are now in the final stages, namely lesioning those areas where the drug has been shown to localize in order to determine whether in destroying sites of localization, the sites of action are also destroyed. The main problems encountered have been to satisfy ourselves of the reliability of the stereotaxic placement of lesioning electrodes in dogs, before attempting the lesioning of our now-valuable swing-sick dog colony. We should be so satisfied in the near future. The cooperation of Dr. Paul McGarry of the Department of Neuropathology, L.S.U. School of Medicine, in the histologic aspects of this work has been invaluable.

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